EXPRESS MAIL NO: TB 817 270 652 DATED: 27 April 1995

PATENT DOCKET P0871P2D2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of Croup Art Unit: 1812

Dan L. Eaton et al. Examiner: L. Spector

Serial No. Croup Art Unit: 1812

Examiner: L. Spector

Priled: 27 April 1995

For: MPL LIGAND

Description: MPL LIGAND

INFORMATION DISCLOSURE STATEMENT

Honorable Commissioner of Patents and Trademarks Washington, D.C. 20231

Sir:

Applicants submit herewith patents, publications or other information (attached hereto and listed on the attached Form PTO-1449) of which they are aware, which they believe may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR §1.56.

This Information Disclosure Statement:

- (a) [X] accompanies the new patent application submitted herewith. 37 CFR §1.97(a).
- (b) [] is filed within three months after the filing date of the application or within three months after the date of entry of the national stage of a PCT application as set forth in 37 CFR§1.491.
- (c) [] as far as is known to the undersigned, is filed before the mailing date of a first Office action on the merits.
- (d) [] is filed after the first Office Action and more than three months after the application's filing date or PCT national stage date of entry filing but, as far as is known to the undersigned, prior to the mailing date of either a final rejection or a notice of allowance, whichever occurs first, and is accompanied by either the fee (\$210) set forth in 37 CFR §1.17(p) or a certification as specified in 37 CFR §1.97(e), as checked below. Should any fee be due, the U.S. Patent and Trademark Office is hereby authorized to charge Deposit Account No. 07-0630 in the amount of \$210.00 to cover the cost of this Information Disclosure Statement. Any deficiency or overpayment should be charged or credited to this deposit account. A duplicate of this sheet is enclosed.

#3 12.9.1 6/14/95 (e) [] is filed after the mailing date of either a final rejection or a notice of allowance, whichever occurred first, and is accompanied by the fee (\$130) set forth in 37 CFR §1.17(i)(1) and a certification as specified in 37 CFR §1.97(e), as checked below. This document is to be considered as a petition requesting consideration of the information disclosure statement. The U.S. Patent and Trademark Office is hereby authorized to charge Deposit Account No. 07-0630 in the amount of \$130.00 to cover the cost of this Information Disclosure Statement. Any deficiency or overpayment should be charged or credited to this deposit account. A duplicate of this sheet is enclosed.

[If either of boxes (d) or (e) is checked above, the following "certification" under 37 CFR §1.97(e) may need to be completed.] The undersigned certifies that:

- [] Each item of information contained in the information disclosure statement was cited in a communication mailed from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this information disclosure statement.
- [] No item of information contained in this information disclosure statement was cited in a communication mailed from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this information disclosure statement.

A list of the patent(s) or publication(s) is set forth on the attached Form PTO-1449 (Modified).

A copy of the items on PTO-1449 is supplied herewith:

[] each [X] none [] only those listed below:

Those patent(s) or publication(s) which are marked with an asterisk (*) in the attached PTO-1449 form are not supplied because they were previously cited by or submitted to the Office in a prior application Serial No. <u>08/196,689</u>, filed <u>15 February 1994</u> and relied upon in this application for an earlier filing date under 35 USC §120.

A concise explanation of relevance of the items listed on PTO-1449 is:

- [X] not given
- [] given for each listed item
- [] given for only non-English language listed item(s) [Required]
- [] in the form of an English language copy of a Search Report from a foreign patent office, issued in a counterpart application, which refers to the relevant portions of the references.

The Examiner is reminded that a "concise explanation of the relevance" of the submitted prior art "may be nothing more than identification of the particular figure or paragraph of the patent or publication which has some relation to the claimed invention," MPEP §609.

While the information and references disclosed in this Information Disclosure Statement may be "material" pursuant to 37 CFR §1.56, it is not intended to constitute an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

In accordance with 37 CFR §1.97(b), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR §1.56(a) exists. It is submitted that the Information Disclosure Statement is in compliance with 37 CFR §1.98 and MPEP §609 and the Examiner is respectfully requested to consider the listed references.

Respectfully submitted,

Date: April 27, 1995

Daryl B. Winter Reg. No. 32,637

460 Pt. San Bruno Blvd. So. San Francisco, CA 94080-4990

Phone: (415) 225-1249 Fax: (415) 952-9881

| Choot | 1 | ٥f | 1 | |
|-------|---|----|---|--|
| Sheet | | OI | 1 | |

FORM PTO-1449 LIST OF DISCLOSURES CITED BY

U.S. Dept. of Commerce Patent and Trademark Office

Serial No. Atty Docket No. 871P2D2 **Applicant** Eaton et al. Group Filing Date

1812

27 Apr 1995

(Use several sheets if necessary)

| | | | | U.S. PATENT DOCUMENTS | | | | | | |
|-----------------|-----|---|-------------|-------------------------------------|-------------------------|--------------|----------------------|--|--|--|
| aminer tials | | Document Number | Date | Name | Class | Subclass | Filing Date | | | |
| | 1 | 4,894,440 | 16.01.90 | Rosenberg | 530 | 351 | 17.09.86 | | | |
| | 2 | 5,073,627 | 17.12.91 | Curtis, et al. | | | 14.08.90 | | | |
| | * 3 | 5,108,910 | 28.04.92 | Curtis, B. M. et al. | | | 22.03.91 | | | |
| | 4 | 5,260,417 | 09.11.93 | Grant et al. | 530 | 351 | 02.04.90 | | | |
| | 5 | 5,326,558 | 05.07.94 | Turner et al. | 530 | 351 | 29.07.90 | | | |
| | | | OTHER DISCL | OSURES (Including Author, Title, Da | ate, Pertinent Pages, e | tc.) | | | | |
| | • 6 | de Sauvage et al 369:533-538 (June | | of megakaryocytopoiesis and | thrombopoiesis by | the c-Mpl 1: | igand" <u>Nature</u> | | | |
| | * 7 | Hoffman, "Regulation of Megakaryocytopoiesis" <u>Blood</u> 74(4):1196-1212 (1989) | | | | | | | | |
| | * 8 | Methia et al., "Oligodeoxynucleotides Antisense to the Proto-oncogene c-mpl Specifically Inhibit In Vitro Megakaryocytopoiesis" <u>Blood</u> 82(5):1395-1401 (1993) | | | | | | | | |
| | * 9 | Mignotte et al., "Structure and Transcription of the Human c-mpl Gene (MPL)" Genomics 20:5-12 (1994) | | | | | | | | |
| | *10 | Skoda et al., "Murine c-mpl: a member of the hematopoietic growth factor receptor superfamily that transduces a proliferative signal" EMBO Journal 12(7):2645-2653 (1993) | | | | | | | | |
| | *11 | Souyri et al., "A Putative Truncated Cytokine Receptor Gene Transduced by the Myeloproliferative Leukemia Virus Immortalizes Hematopoietic Progenitors" <u>Cell</u> 63:1137-1147 (1990) | | | | | | | | |
| | *12 | Vigon et al., "Characterization of the murine Mpl proto-oncogene, a member of the hematopoietic cytokine receptor family: molecular cloning, chromosomal location and evidence for a function in cell growth" Oncogene 8:2607-2615 (1993) Vigon et al., "Expression of the c-mpl Proto-oncogene in Human Hematologic Malignancies" Blood | | | | | | | | |
| : | *13 | 82(3):877-883 (1993) | | | | | | | | |
| | *14 | Vigon et al., "Molecular cloning and characterization of MPL, the human homolog of the v-mpl oncogene: Identification of a member of the hematopoietic growth factor receptor superfamily" Proc. Natl. Acad. Sci. USA 89:5640-5644 (1992) | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| : | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| camine | er | | | | Date Considered | | | | | |

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.